

# AMERICAN FARMER.

RURAL ECONOMY, INTERNAL IMPROVEMENTS, PRICES CURRENT.

"O Fortunatos nimium sua si bona norint  
Agricolae." . . . VIRG.

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## AGRICULTURE.

FOR THE AMERICAN FARMER.

### A GOOD ROTATION OF CROPS,

*Proved by actual experiment.*

March 10, 1822.

MR. SKINNER,

SIR,—Having settled upon a poor and worm out farm, and having derived great advantage, both in the improvement of my land and stock, from the following course of crops. I send it you, for the use of such of our fellow citizens as may be disposed to try it.—The farm is to be divided into six fields; the course is as follows:

Fields	1st year.	2nd.	3d.	4th.	5th.	6th.
No. 1.	corn	wheat	clover	wheat	pasture	pasture.
2.	wheat	clover	wheat	pasture	pasture	corn.
3.	clover	wheat	pasture	pasture	corn	wheat.
4.	wheat	pasture	pasture	corn	wheat	clover.
5.	pasture	pasture	corn	wheat	clover	wheat.
6.	pasture	corn	wheat	clover	wheat	pasture.

The objection I have to the usual six field system is this; the ground by laying two summers in clover, gets very foul, and the wheat is often injured by blue grass; and again upon poor ground the second summer you frequently find more than half the clover roots destroyed, and the ground then, is by no means in so good a state for turning under for wheat, as the face of the first year; (the season you will perceive on which the clover seed is sowed on the wheat, I do not count) Every one in the habit of turning in clover lays knows, that the wheat stubble is always well set with young clover, blue and some green grasses, which afford a most excellent pasture, and will enable you to keep double the quantity of stock, that your land would otherwise feed, particularly if you sow on your wheat, half the usual quantity of clover seed: clover alone on our thin lands will not stand the hoof, giving way directly, and when eaten close, much injured by the sun; but when combined in this way with the natural grass, one acre is I think equal to four without it. It also gives you the advantage of a grass lay for your corn, which upon thin land, or indeed any other kind, I think very important, never having been able to make a productive corn crop from a stubble; my practice is to double furrow in the fall and plough out in the spring.

\* No person should say any thing against a rotation, that has proved beneficial by an actual experiment: but at the same time we cannot help thinking, that instead of two years for mere pasture, the latter one would be better employed by a crop of buck wheat ploughed into the ground; thus giving the soil not only rest, but a cordial for the ensuing labour.

Ed. Am. Far.

In addition to the six fields above named, I take off four or five lots of from 15 to 20 acres each, as may best suit the size of the farm, one of which I annually till in potatoes, turnips, pumpkins, corn, &c. and which is well covered with manure. This in the fall, I put in wheat in flat beds, (the large fields I prefer in ridges) and sow with it timothy or orchard grass, and clover in the spring. This gives you three or four other lots to mow, and upon which you will make double the quantity of clover seed, that will be consumed upon the farm, as well as a good stock of hay, and you will also be enabled to let the clover in the field intended for wheat, lay and rot during the summer, and turn the whole under during the fall; a mode strongly recommended by that excellent agriculturist, Col. Taylor, of Caroline county Virginia. The land under this course will yearly get better; you will have abundance of both hay and pasture, for upon one of the fields marked as pasture, you may always, the year after the wheat is taken off, cut an excellent crop of hay. The one pasture field, I have found enough for my stock, until the first crop is cut from the other, I then change pasture alternately. The lots I mow in the fall, afford sufficient pasture to fatten several beeves without corn. I prefer sowing the clover seed the beginning or middle of March, as the weather may suit, as I find it less injured by the frost, than the dry heat of summer, and which the early sowing gives it strength to withstand. Turnips I till largely, and find great advantage in feeding them to my cattle and hogs; an account of which, and the mode of cultivation, will perhaps be hereafter given by an

### AGRICULTURIST OF DELAWARE.

[The valuable suggestions in the above communication compels the Editor to hope, that the author will find leisure to fulfil the promise intimated in the conclusion of it.] Edit. Am. Far.

FOR THE AMERICAN FARMER.

### THE THEORY AND USE OF LIME AND PLASTER OF PARIS.

*Continued from page 373.*

Edmwood March 12, 1820.

MR. SKINNER,

I now resume the subject of lime, began in your No. 47, Feb. 10th.—You will perceive by inspecting that paper, I have assumed the fact, that limestone is a rich ingredient in any soil when thoroughly incorporated; and that all the preparations of lime, are more or less of the same nature. But I will not assert that it may not be overrated: nor that there are facts wanting to prove that the beneficial quality may not be withheld or destroyed by undue mixture with other articles.—Thus we find that lime which contains much magnesia, may be laid on land to six, and even ten times the quantity of lime usually employed.—It is

quite common in some parts of England to use 200 to 500 bushels of such lime.

How much more readily may we not expect the compounds with acids to be affected? The scales of chemical bodies that decompose each other, exhibit to us various articles that decompose gypsum and among the rest carbonate of magnesia\*. If then a decomposition takes place in using gypsum, disappointment is the result; for the action of a few bushels of corroded limestone could not be perceived on the crop. Those who mix wood ashes with their plaster, act very injudiciously, and should take notice of what is observed above. The degree, or quantity of carbonic acid in limestone, as found in quarries and in the finer particles mixed in the soil, renders it insoluble without access to solvents. By which provision a kind Providence hath preserved it for successive generations, and particularly for the prudent and industrious farmer and mechanic. If it had been very soluble or liable to great and sudden access of solvents, it might have benefited our ancestors; but their successors would merely have gratified their eyes, by beholding some splendid stalactitic columns and incrustations adorning a subterraneous cave. The great mass would ere this have reached the ocean.

The access of agents is nevertheless constant, slow and sure.—The carbonic acid is continually evolving from putrifying vegetables about and beneath the surface of the earth. Pyrites (a combination of sulphur and iron) is continually in a state of decomposition when wet: and must inevitably form gypsum where it is present. The universality of both these ingredients is evident from the universality of hard waters. It is gypsum that has this effect on soap. But independent of these mere chemical solutions, limestone is (like other stones) continually crumbling to atoms by the agency of electricity, light, temperature, water, air, disturbance and mixture. Every one of which are brought into action by the exposure of good farming. These are the modes intimated in my former paper by which limestone is dissolved.

If the ignorance or the avarice of the farmer cause him to draw on the soil faster than those solutions and decompositions take place; the same disgrace must ensue, as when he draws on his banker before his interest is due: a protest, a non est.—It would appear that bad usage will cause even the soil to revolt, and a separation of the various constituents may be effected.—A separation, natural or artificial is an unequivocal mark of sterility. Thus to find a bed of clay here, a flat of sand there, rocks and stones sticking out in various quarters, the calces of iron forming ores and ferruginous stones.—The more precious salines and the remnant of mould washed off and taking post in some obscure swampy corner, beyond the destroying plough! is to find destruction in full march, and only wants a little time to exhibit poverty realized and tangible.—and when assisted, or brought about by the bad conduct of its owner, we may surely give him all the credit of adding his mite to the curse originally entailed on the earth.

This pitiable state of things calls aloud in the ear of reason to bring back these deserters—to reduce them, and to unite them once more in the bonds of

\* The quantities of magnesia made at the salt factories in New-England, shew us where this articles to be found, and give us another reason for gypsum being often ineffectual on the coast.

agriculture—whilst separated, they feel strongly disposed to form concretions and insoluble masses. It would seem that the earth, which is never idle, is intent upon one of two operations—either mineralizing or vegetating. To the former state, exclusion from varying temperature, from light, from air, and from water sometimes, at other times excess of water contribute; and especially a separation of the natural soil and rest. To the latter a general commixture of all the constituents and especially water and constant disturbance contribute; by which means the peculiar elective choice, and intrinsic attraction of the ingredients are interrupted\*. The solvent powers of each, act as fluxes†, and the whole soil becomes obedient to the gentle attractions of the plant. This coarse mineralizing act of the earth, is to be distinguished from another in which the plant is concerned.

Thus at the death of the plant, a new state of things ensue. The attractions which distinguish life having ceased, the body of the dead vegetable is delivered over to chemistry: fermentation, decomposition or rot ensue—or if this process is artificially hurried by fire, it is nearly the same. The plant lays down all that it obtained from the earth, as well as all that it has elaborated out of it.—The more precious salines are thus collected of formed, viz: alkali, nitre, ammoniacal salts, as also carbon. Thus vegetation seems to stand between two processes.—To interrupt the first, and promote the second, are equally the objects of the true farmer. For these once organized bodies and salines are truly the salt of the earth in agriculture.

Those who hunt for a distinct pabulum to promote the growth of vegetation, are the alchemists of agriculture—no one article is entrusted with such treasure. Let them say lo! it descends from the clouds, or lo! it is in the earth—believe them not.—It is the result of all combined. Not only earth and every saline, but every stone and every metallic calx, and all else that is solid below, with all that is fluid above; not only water, but air and light, with caloric and electric effluvia; to which I may add the gravitation of all that is ponderable, and the attractions of all that is imponderable, all conspire in the formation of the great family of vegetation. Although it would be in vain for any man to assign each of these elementary bodies a place in the vegetable economy, yet it is evident that there exists a great disproportion of wants in the various articles that compose the genera, species and varieties of vegetation. Thus we find that some few articles will grow in mere sand—more in sand and clay united—still more in sand, clay and lime, with unceasing perfection, &c.

To particularize, some appear to require more silicious earth, as the Bamboo, which gives fire with steel, some more argillaceous earth, as the forest trees, which are said to reproduce clay, when they have been suffered to fall and rot; some more lime, as the cara tomentosa, which will yield 50 pr. ct. weight of that article, some more salines as corn, buckwheat, and artamesia, the former of which is said to yield the most potash per pound (from the stalk) of any other vegetable in America, and although they may form these salts, their necessities for them is rather

\* The strong attractions of lime and sand, are greatly interrupted by loam, as every mechanic in brick or stone, can testify, which will explain what is meant, to the most illiterate.

† See Mr. Henry on the increased solubility of silicious and argillaceous earths combined; or their action on each other.

‡ I am persuaded from a consideration of the great analogy of the vegetable family to the animal, (without giving way to Dr. Percival's scheme of animated vegetation) that we have overleaped the boundaries of true physiology, in favour of chemistry by assigning the gaseous elements, places in vegetable nourishment. We cannot make such application yet awhile to animals! It is enough that we imitate with the gaseous oxide of azote, inebriating drinks.

proved, than refuted.—Some more water as the order of aquatics, some, more air and light, as the plants which refuse to grow under larger plants, some, more electricity, as the flax, which will grow an inch in a few hours, by the artificial application of electricity, some, more atmospheric gravitation as the lighter plants, that almost float in the air, and some, more heat, as the large mass of tropical plants.

Whilst on the other hand, some will nearly dispense with air, as mould, subterraneous and submarine plants; some with earth and water as the cactus family, and some of the epiphydiums; one of which the *E. Flos xris* will grow for years, and flower when hung to a nail in the ceiling; whilst another species of parasitic epiphydium mentioned by Dampier, under the name of *barren pine*, has natural buckets or reservoirs for water sufficient to supply the thirsty traveller of the tropics. Some plants will dispense with both light and air as the tuber, (truffles) so greedily sought after by hogs and epicures, that what one roots up, the other stands by to root away. Some require little, or no assistance from gravitation, heat and light in sustaining their posture, as the various procumbent plants, which form (in this particular) a striking contrast with the necessities of corn; as may be proved by the inspection of a field, on a fine day succeeding a prostrating storm; and finally, some would appear willing to dispense with the electric fluid, as the mimosa.

"Weak with nice sense the chaste mimosa stands,  
From each rude touch withdraws her tender hands;  
Oft as light clouds o'erspread the summer glade,  
Alarm'd she trembles at the moving shade;  
And feels alive through all her tender form,  
The whisper'd murmurs of the gathering storm."

DARWIN.

I have been thus minute, in order to lay bare the philosophy of the rotation of crops, on these *disproportions it rests*, and blind is the man who cannot perceive it; more imprudent he that refuses to attend to it.—When it is once arranged to perfection, it will be perceived that the present generation have been but babes in the noble science of agriculture.

In the statement I have exhibited of lime and plaster, I have attempted to withdraw the theory of the nourishment of the plant from the laboratory, where it has lost its analogy to the animal economy, and only withered among gases; to the more rational one of physiology, giving them as it were a solid dish to feed on, and air only to breathe on; and I trust I have propped my theoretical kiln with strong though coarse stakes, and submit it to the fiery ordeal of the public eye—which like so many rays converging to a small focus, will soon inflame the mass. Methinks I hear already the critics voice as so many oystershells cracking and flying from the kiln. "The wood, the hay, the stubble," will be consumed of course; but I trust there will be left a good heap of incombustible matter to enrich the uncultivated minds of some of our fellow farmers, and which uncultivated state, has unfortunately, too often its type, in the arable field.

Having now, as I suppose, tired those who despise all that is theoretical; I hasten to produce the compost alluded to in the first part of this paper, published on the 10th of February. It is the small broken refuse, that remains after removing heaps of roasted oystershells, as thrown out by families, or oyster-houses. I am rather an enemy to composts; but nevertheless, when they have been found by experience to be efficacious and not projected by a mere blind theory; they should be attended to, and like the old compound medical prescriptions simplified until the active parts are ascertained, and the useless trumpery thrown out. This accidental compost I find produces grass quickly on the poorest soil, and by a fair comparison with ashes, and with stable manure, I have found it quicker than the former, and equal to the latter, if not superior, as a top dressing; how long it will be so, remains to be ascertained.

It cannot take any great powers of penetration to

find out the ingredients of this compound, and this is absolutely necessary if we mean to use it; for it must be imitated to procure a sufficiency.

On inspection, the first article that we observe, is a portion of litter and lime from the thin lamina of the oystershell, which about the mouth (as we term it) is so delicately thin and flexible in young oysters, as to appear partly membranous. I suspect, besides lime, there may be some animal matter in this part of the oyster; I leave that to chemists to determine. I shall call this first portion *lime*, which together with a little that flies off from the pearly bottom of the shells, is at any rate all the lime that is formed by the culinary fire.

The second article, and very conspicuous, is the roasted mud, that adheres more or less to all oysters, and forms a large portion in the mass of this compound.

The third article is the sea salt, with which both the mud and the shells are highly seasoned. All our oysters are from salt rivers.

The fourth article, is the ashes of the wood used in roasting, and from the very minute greasy adhesions to the shells when taken from the river; this last source is scarcely worth noticing, but there may be a little barilla in it.

The fifth and last article that I know, is the animal matter, produced in part from the heart usually left in the shell, and the long polypus sponge like adhesions to many oysters though not to all, and perhaps the thin lamina of the oyster.—These five articles I think form the whole compost. It may be coarsely imitated by 10 bushels of shell lime\*—80 bushels of burned earth from low ground, or from the river, if possible—5 bushels of ashes—2 bushels of salt, and 3 bushels of animal matter, in all 100; which will make a good, and not a very dear top dressing for an acre. It may be much improved no doubt by actual experiment. Four of the articles, I need not say more, where they are to be had—the 5th may be supplied nearly as easy from spoiled, or fresh fish, carriers' shavings or from ordure. This last when mixed with ashes for 60 days, will loose its flavour entirely.† The lime will consume the fish, or cuttings, if they are employed. The salt should be dissolved and mixed with the ashes, which will form barilla, and the rest *secundum artem*.

\* The broken piece of shells not burned are not worth notice.

† Perhaps this is the Chinese cake.

TO THE EDITOR OF THE AMERICAN FARMER.

On Ruta Baga, Mangel Wurtzel, &c.

In your number 45, I read with pleasure the communication under the signature of RUTA BAGA. The perseverance of the writer in the cultivation of that plant, amidst some discouragements and several disappointments in an untoward season, and his real though but partial success, are gratifying. A gentleman of my acquaintance in Massachusetts, agrees, I am informed, with him, in stating that the roots of the Ruta Baga given to his milch cows, produced yellow butter, and did not injure its flavour. I had expressed my fears, as to flavour, of a different effect; having never tried the root in feeding milch cows. And now, notwithstanding the above two statements, my apprehensions are not wholly removed.

Within a few days past, turning over some notes I had made when reading Sir John Sinclair's account of the improved Scottish Husbandry, I found the following, which had whol-



ly escaped my memory, when I wrote you of the 4th of January. "The Swedish Turnip gives the butter a superior colour, and less taste of the vegetable." That is, less than other turnips, of which he has treated a page or two before. But it was added, that one ounce of saltpetre put into a gallon of cream, rendered the butter perfectly sweet.—Vol. II. p. 284.

From page 279, I had made the following notes: the Swedish Turnip superior to any other, a more nourishing food, and retaining their juices in the spring, and better enduring frost. But they are so hard as to be very pernicious to the teeth of stock, particularly the very young when shedding their teeth, or the very old; and yet (says Mr. Rennie,) "without them there is no safety nor security either for feeding, [fattening,] or breeding stock."—"They require rich land, or a great deal of manure."—p. 284. One farmer observes, "that where the soil is thin and dry, it is impossible to raise a good crop of Swedes, under any management."

To understand what is here said of the bad effect, on the teeth of stock that are very young or very old; and yet that there is no safety to the farmer without them; it must be recollected, that turnips are generally given *whole* to the stock, and that it will require a considerable effort of the teeth to enter the large and hard roots of Ruta Baga. But the *security* they afford to the farmer, arises from their superior *hardness* to endure *frost* (compared with the common turnip) when left all winter in the ground, as is usual in Great Britain.—If I rightly remember, Mr. Cottbett speaks of giving the Swedish Turnips a *chop* or *two* to fit them for stock; but unless cut into pieces as small as, or smaller than common potatoes, even oxen find some embarrassment in crushing them. The English turnip-slicer, or some equivalent instrument, I apprehend will be found necessary to prepare them properly and expeditiously for all kinds of stock.

After all the eulogies bestowed on the Ruta Baga, (and I think it entitled to great praise) I am inclined to think the Mangel Wurtzel is the more valuable root. It is as easy to be cultivated, only longer in growing—not annoyed, that I have observed, by any insect—more easily harvested—more tender in its texture, and more readily chopped into pieces in equal quantities much more nutritive—and according to the accounts of its cultivation on *strong lands* in England, vastly more productive, yielding, as a common crop forty-eight tons per acre: while the crops of Ruta Baga seldom surpass, and generally fall short of twenty five tons per acre.—But to insure large crops, under the best culture, *good seed*, of both roots, is essential. More than one or two experiments may be necessary to decide which of the two is entitled to preference, as to the *main crops*; while every improving farmer will doubtless find his interest in cultivating both.

T. PICKERING.

Wenham, March 2, 1820.

March 3. I have this morning opened the volumes of the Memoirs of the Philadelphia Society for promoting Agriculture, to examine, more particularly, the communications concerning the Mangel Wurtzel; and this perusal has left no room for me to hesitate in giving it a decided preference to the Ruta Baga, for the farmer's principal root-crop; provided it can be preserved for spring as well as autumn and winter feeding: and with a little care, I am disposed to think it may be so preserved; especially in the milder climates of the middle states, to which it appears to me to be peculiarly adapted.

You have occasionally introduced into the American Farmer, some entire articles from those Memoirs. I believe you could present to your readers nothing more valuable, concerning roots, than a digest, which you can make, of the information those Memoirs contain on the subject of the Mangel Wurtzel: exhibiting merely the manner of preparing the ground by a ploughing and manuring—the sowing of the seed—the culture of the plants—their products in leaves and roots—and their application for all sorts of live-stock. All the papers on this subject, appear to be in the third and fourth volumes.—I here transcribe one passage, because it bears on the question discussed in the former part of this letter. You will find it in the fourth volume, page 152, in a communication from Ireland. "The leaves [of the Mangel Wurtzel] produce two or more crops in the seasons of summer and autumn; and both leaves and roots are most valuable for feeding milch cattle; and unlike Turnips or the (cabbage) species, communicate no bad taste to the milk, but much improve it by a most delicious flavour."

The British farmers have reason for giving the preference to the Swedish turnips for a principal crop; because they can leave them all winter in the field, taking them up for their stock as wanted: whereas the Mangel Wurtzel must be harvested in autumn, and in some way sheltered against the frosts of winter.

T. P.

FOR THE AMERICAN FARMER.

## ON HEDGING—No. 6.

Continued from page 350.

By CALEB KIRK, OF DELAWARE.

It might be further noted, that the seventh year after planting is more properly the limit of cost in forming a hedge; what is done after that period is nothing more than *trimming*, which amounts to one cent and a quarter per rod annually, and that is to be perpetual if a neat, handsome hedge is looked for. But if neatness is dispensed with, and carelessness preferred, the consequence will be a natural growth of thorn and every other production, that will according to soil and climate associate with it, producing a rugged and forbidding appearance, and affording shelter for many pestiferous plants, such as every husbandman ought to guard against.

According to my estimate, *seventy-five cents* is the labour necessary to be *annually* bestowed on every sixty perches, that is one day's work including board in my neighbourhood: from this statement each

farmer can make his calculation, according to labour on his own farm, by days works.

If the proper care is taken of the subject *timely*, and *annually*, I am of the opinion that *fifty cents* might safely be a fair estimate, for the *annual* expense of sixty perches, as the work lessens by frequent clipping and pruning extraneous matter, so as to leave nothing but what is necessary. The preparation of posts and rails, that I frequently see making by the farmers in the course of the winter, as I pass through the country, and the setting them up in the spring, leads me to believe there is *much* more labour in doing all this than hedging, besides the destruction of a quantity of their best timber, which ought to be taken into the account of wooden fences, and that renewable often, according to the quality of the kind made use of. The appearance must be regulated by the fancy of the owner.

We are often governed by our prejudices of custom, setting utility aside. The introduction of live fences, might be a means of avoiding many a controversy amongst neighbours, about keeping up their line or division boundaries, and harmony produced in the stead of discord, as well as a cure for breachy cattle, and other live stock.

They are not disturbed by a gale of wind, that often prostrates the rail fencing, an instance of that kind occurred last year, by an extraordinary gale, that threw down thousands of panels in my neighbourhood, a portion of which fell to my lot; it came on in the night; next morning the scene that presented was truly awful; *buildings*, as well as fences, were prostrated in every direction. But when I turned my view upon the hedges, not a trace of violence was to be discovered there.

Most parts of the country, and especially near towns and villages, there are straggling individuals crossing farms for various purposes, and particularly in seasons of fruit. Good hedges are a guard against depredations of this kind, and if bold enough to pass by gate ways, they are more readily brought to account by the owner.

Many advantages attend the use of hedges, that will not be enumerated. But one more I shall remark, that is the *ornamental* part. A farm neatly hedged, has a pleasing appearance at any time of the year, but when in full leaf, the lively green bordering to every field adds beauty to the crop it incloses, gives confidence to the owner, that neither his own cattle, nor his neighbours can deprive him of the benefit of his labour, whether the crop be grain or grass.

I shall now put one query to those who object to hedging on account of being tedious, or too long coming to maturity, and there are many who object on this ground: they look at the enjoyment as too distant, but if such objections were to predominate in farming, no improvement would be made of a permanent nature.

What proportion or percentage in value, should be annexed to a farm well hedged with living fencing, compared with one that was inclosed by perishable materials?—Would not the advance in value far exceed the *expense* that gave it that preference; less timber is sufficient on a farm, *building* and *fuel* are the principal use after the demand for fencing ceases, for those two purposes we have no substitute, but for fencing we may have not only a substitute, but a considerable saving in expense and durability.

A great mistake is made by some that have made an attempt at live fence, by planting rows of ornamental *trees* along the side of their intended live fence, especially on public roads, who might on the least reflection, see the impracticability of making a hedge grow or flourish under any kind of large growth tree that must shade, and overpower the humble growth of thorn, even if *congenial* in their natures; but as some kinds are deleterious or hostile in their effects, they ought to be avoided. The *Walnut* and the *Cedar* particularly; the former was proved in a case of my own, as noted in a former

timber; the latter has been amply demonstrated in various instances, but one deserves notice.

My worthy neighbour Wm. Armor, who has done much at propagating the native thorn of Delaware—upwards of twenty years past, planted a hedge upon the side of an avenue, leading from the old public road to his dwelling or mansion house, which had been previously planted by his ancestors with evergreen cedars, and had grown to considerable size, before the thorns were planted; these he set about ten yards distant from the cedars, believing them at that distance safe from any influence of the row of trees, and his calculation might have been correct as it regarded some kinds of timber—but not with the cedar. It must be upwards of twenty years since the thorns were planted, they grew, but very slow. I frequently observed their unhealthy appearance, some years before I knew the cause—on inquiry, he informed me, it was the influence of the cedars—my ardent desire for the welfare of hedges, caused me to propose the cutting down the cedars, but found his veneration for the labours of his ancestry, in that ornamental work, outweighed all considerations concerning the hedge in that place, and it remains a monument of the antipathy that subsists between the cedar and thorn; the latter has the appearance of age and decline—or rather that of being neither alive nor dead, this is the nearest idea of its situation, that I could give you, as a proof of the uncongeniality of their constitutional natures. This subject is worth further pursuit by some abler hand; the antipathy and sympathy of the vegetable kingdoms, affords ample room for inquiry and discussion,—this inquiry might lead to the establishment of facts very useful in the course of husbandry, as connected with the rotation or manner of varying our crops, on the same soil, the reasons for which, in general we are ignorant of, for although we assume to know much on that, as well as many other points—experience daily furnishes evidence of our want of knowledge on agricultural points, that we suppose we are well acquainted with.

Having in the foregoing remarks on hedging endeavoured to cast what light my attention and experience on that subject enabled me to do—my views were to give the enquiring husbandman all the aid in my power, to secure the product of his toils from waste, a consequence often attending bad enclosures, and more especially so, when amongst his live stock, there are depredatory dispositions; one animal of that inclination by success in making breaches, will very soon draw others in the same practice.

I have observed a working ox of my own, after being turned out with other cattle that were harmless, and gave no trouble to manage without him, as soon as he left company to search for plunder, there were certain others that would immediately follow after, knowing his ability to make way for them, to share in his plunder, one of his followers or pupils (if I may use the phrase) was the favorite heifer that was bred from an excellent race for milk, and being estimated valuable, has obliged me to turn off the ox in the prime of his labour, rather than perpetuate that disposition amongst the other part of the stock, and to have the infection to take place amongst the best of my milk cows when young, would be mortifying indeed.

I therefore gave up the ox, and with him the trouble was at an end; it ought to be noticed, that those depredations were made through wooden fences, and such was his dexterity and strength, that nothing short of a good post and rail, and that new or other ways uncommonly strong would turn him, to remove a worm fence (as they are termed) was seemingly only sport for him, if the booty on the other side was promising. I have frequently viewed him at the work, and the expectants waiting with anxiety for his success—whilst concealed from his sight, the work would go on, but if I appeared in his view, all operations ceased, he would give over the attempt, and leave the place until a more convenient time, but

when danger of detection was over would resume and effect his purpose.

I was never more mortified with his ingenuity than on the morning of our beginning to cut the last wheat harvest a lot of excellent grain stood, the evening previous, half bent under the promising product, had not been in any way molested by any depredatory foot, until he that night opened thoroughfare for all the other cattle to follow him into the feast of luxury—next morning it presented a scene that sealed his destiny.

Although he was ungovernable by wooden fences, I never knew his attempting a thorn hedge of any kind; where he was enclosed with hedges, he was as harmless as any other of the stock, and being an excellent working bullock, induced me to pass by many instances of depredation, until his attack upon the harvest field.—I am now clearly and decidedly settled in my choice of fencing, either with thorn or stone, as a safe and permanent fencing—the stone I shall say further on hereafter. But the thorn if carefully and rightly managed, is certainly worth attention where stone is absent.

I never made any calculation as it regarded the comparative expense between hedging and rail fencing, until it became a necessary item in the foregoing inquiry, preparing it for the view of others; and I confess I was so led astray by the general impression of "expensive" and "tedious" annexed with it, that when I made out the estimate as appeared in the foregoing number, I had doubts on the correctness until I consulted my neighbours, who have been propagating and pursuing the same mode of hedging—their calculations so well agree with mine, that I can vouch for those given to the public, being amply sufficient to cover every item that is requisite in forming a hedge.

Note to the Editor—I don't know that I have much more to communicate at present on hedging—

As the time of sowing grass seeds is near at hand, I had thought of making some remarks on that head and the cultivation of barley—both of which are much neglected in many parts that would be benefited by attention to them—and some observations on the practice of my valued friend Wm. West, the noted grazier of Delaware County, Pennsylvania, brother to the celebrated B. West, the painter. Maryland would be improved by attention to the above, as it is remarkably deficient in grasses.

### Occasional Extracts.

Near Philadelphia, March 8th, 1820.

RESPECTED FRIEND,

The usual course of husbandry in my neighbourhood, is to prepare the sod for corn by fall ploughing, to add from 30 to 40 bushels of manure according to the strength of the land—clear off the corn stalks, plough the next autumn for Oats, and follow with Wheat or Rye—reserving the manure for the last crops before the grass is laid down.—It seems very desirable to drop the crop of Oats, as exhausting to the soil, but considered necessary to cleanse it I shall this year substitute it by Millet,\* and if I can get a supply of clay ashes in time, top

\* A very intelligent farmer in this neighbourhood, assures us that such is the tendency of Millet to harden his land, that he would not permit it to be cultivated even though he could have done it at another's expense.

Editor American Farmer.

dress it therewith, or even Plaster Paris. This latter article, instead of being used in the spring, it is by some found most useful after the first crop, when the dry weather has set in—and from analogy it appears most rational. It is found useful on all descriptions of vegetables, and if put in with potatoes will produce a wonderful effect.—Many parts of our country no longer yield good crops of clover—and the Cocks' foot or Orchard grass, has become a great favorite, as a durable and productive one—it was long condemned from our ignorance, that the seed will heat in the sheaf if put together in a large body—but if carefully dried, it yields most abundantly of a good quality, and some find half a bushel sown per acre an ample supply. My neighbours have this year sold this seed at \$2—Millet, there is a very limited supply at \$3—Clover Seed, \$9½ to 10, expected to be lower—Herds Grass and Timothy are little used in my immediate neighbourhood.—Our soil is high and naturally poor.

I am very respectfully,

Thy friend,  
JEREMIAH WARDEN, JR.

### Large Carrots.

York Springs, 4th Dec. 1819.

MR. SKINNER,

SIR,—On taking up our fall carrots a few days since, the size of several of them appeared so extraordinary, that I had the curiosity to measure and weigh a couple of the largest—which were as follows.

That of the greatest size, measured 17½ inches in length, and 10½ inches round the top. At about half its length, this root had apparently come in contact with a small stone, which had caused it to put forth two additional forks. The weight of this carrot was 2 lbs. 15 ounces.

The lesser one, a clear stem of 19½ inches in length, and 10½ in circumference at the top; weighed but 1 lb. 15 ounces.

My gardener who is an old and experienced one, having assured me that he had never seen any thing equal to these, I have made this small sketch which you may possibly think worthy of a place in your collection.

These carrots grew in a light alluvial soil, and are of the pale kind, growing from seed saved three years since by my then gardener Richard McGee. I mention this circumstance as it has been lately suggested, that old carrot seed will produce plants of but a diminutive size.

### On Stall Feeding.

MR. SKINNER.

The following extracts from the article "Stall Feeding," Rees' Cyclopaedia, may be of service in solving the doubts of your Correspondents, "Friend," and "a Subscriber."

"Stall feeding of bullocks with potatoes, given in different states of preparation, have



been for some time extensively practised in Sussex, and is much approved of by many. They there find that a beast of from one hundred and forty to one hundred and sixty stone weight, eats from one to two bushels of the roots in the course of the day, but consumes of hay, not much more than ten or twelve pounds in that space of time." "And a careful experimenter, who was largely in the practice of fattening oxen with them, it is said, gave them up—from a conviction that, with every advantage of breed, attention, warmth, and cleanliness in regard to the animals, they would not pay more than four pence the bushel."

Further, the Swedish turnip when it is cultivated in a proper manner, is a most valuable root, when used with this intention.—"In some trials which we have lately attended to, it was found to have the advantage, nearly in the proportion of one fourth; and in other experiments, it is said to have gone still farther in this use."

"And the proportion in which they are consumed by the fattening stock, has been found to be something more than a third of the weight of the cattle by some; but by others, about a third in the day, as stated in the Gentleman Farmer. However, in other experiments carefully made, an ox from seventy to eighty stone, has been ascertained to eat something less than three hundred weight in the course of the day, besides chaff and hay; and small cows of about thirty stone, one hundred weight and three quarters in the same time. And in the Rev. Mr. Close's trials it was found that when consumed in stalls and sheds, an acre of good turnips, will completely winter fat an ox of fifty score;"—

"When this root is given in the stall, from its very succulent nature, it becomes necessary to employ as much dry food as possible during the use of it, in order to the expeditious fattening of the cattle by such means."

CORNHILL.

\* Meaning probably 14 pounds to the stone.

### To the People of Maryland.

The undersigned having been appointed, at a public meeting held at the Exchange, on the 9th inst. to invite your attention to the necessity and advantages of forming a company for the purpose of collecting and propagating fruits of the best quality, we derive satisfaction from the belief, that the mere announcement of the object, will at once awaken you to a sense of its importance.

That there is, at present, lamentable imperfection in the quality of almost every species of fruit, cultivated in this state; is notorious almost to a proverb; hence, it is not unusual to see such peaches, for example, as every farmer might have, selling in our market, at the rate of four dollars per bushel; and other fruits of the best quality, high, in proportion; while the growers of such, are as well known by their fruit, as the most eminent men in the most difficult departments of science or professional skill.

To remedy an acknowledged evil, it is first necessary to ascertain its cause—what then, let us inquire is the cause of the scarcity, and the imperfection of the various kinds of fruit in this state? Is it to be attributed to any peculiar and uncongenial influence

in our soil and climate? on the contrary, it is apprehended that none of the United States, embraces greater variety of soil, or a climate better adapted to the perfect growth of choice fruits, than Maryland; occupying as it does, the happy medium, exempt alike from the extreme cold of the northern, and the intense heat of the more southern latitudes.

The undersigned are of opinion that the chief barrier to the more extensive planting of good orchards, and the acquisition of a more abundant supply of the best fruits in this state is to be found in the total want of a good nursery; where the farmer may apply with well assured confidence in the certainty of obtaining fruit trees in all the variety, and of the genuine kind such as he may desire to plant.

At present, Nursery-men abroad, whose sole object is gain; under no adequate sense of responsibility, send amongst us for sale, trees of the most inferior sort, taking special care to baptize them with fascinating names: We buy, plant, and cultivate them at great expense, and after some seven or ten years have passed away in vain anticipation of gathering fine fruit, behold, they prove utterly worthless, or at most, fit for swine; and should the deluded purchaser have resolution to renew the attempt, as long as he is compelled to depend on foreign interested traders in the article, he remains exposed to the same cruel deception, and must continue to reap the same bitter fruit.

To guard most effectually, against all imposition, and that the farmer may depend with perfect confidence on his procuring the best fruits and of the identical kind he proposes, it is intended in this case, that the managers shall themselves, and with their own hands, select the various fruits, to be introduced into the nursery.

Adopting these precautions, and having the guarantee of responsible characters, whose only reward will be the consciousness of having contributed to the attainment of the cheapest, most innocent, and healthful luxuries of social life; the purchaser will feel assured, that his labour, his money, and what is still more precious, his time will not be expended in vain. Prompted by this confidence, our state would soon present a more cheerful, thrifty, and honourable aspect: fine orchards of well selected fruit, would greet the eye of the traveller, who now sees, only here and there, a straggling outcast fruit tree, which providence permits to linger as it were, a standing reproach on the character of the land holders of Maryland, proclaiming to every passing stranger their habitual neglect and improvidence.

Taking another view of this subject, the undersigned have the pleasure to believe that in this appeal, some reliance may be placed, on the patriotism of their fellow citizens; who will not fail to reflect, that by establishing a nursery of good and genuine fruits at home we shall retain amongst ourselves the very considerable sums of money, which it is but too certain, are now annually sent away, to reward the industry of the more thrifty and enterprising citizens of other states, thereby swelling the balance of trade, which for many years been constantly against us. It is but natural however, that ignorance and improvidence at home, should pay tribute to industry and enterprise abroad, but we trust the time has come, when Marylanders will no longer wilfully endure this state of ignominious dependence.

To illustrate in some measure the extent of the demand, and the precarious nature of the supply from abroad, we submit a single extract from a letter at hand, just received by one of the undersigned, from Pennsylvania, dated the third inst.

"I have received the order forwarded for Apple trees, but it will not be in my power to supply them; my own nursery and the several nurseries in this part of the country are nearly run out. I went yesterday about 15 miles to a nursery and purchased all that were fit for planting, but they will be far short of the quantity required."

I have received an additional order from a person

about 50 miles on the other side of Baltimore. He is in want of upwards of 2000. Tell the applicants to keep in heart for a short time, as I intend to graft between twenty and thirty thousand this spring; amongst them are several new kinds, some of which are those sent me by my friend Hillan!"

Amongst the certain advantages to be derived to the community at large, from the propagation of the best fruits, the philanthropist will not overlook its moral influence on the character and habits of society; the multiplication of good apples may be expected to encrease the quantity, and to diminish the price of good cider, and that wholesome beverage would in that proportion, supercede the pernicious use of ardent spirits, so much to be deprecated. It may be mentioned as a remarkable fact, not to be disregarded in the contemplation of this subject, that at this time a barrel of whiskey may be got much easier and at a cheaper rate, than one of good cider; are we then to be surprised at the degrading and beastly vice of drunkenness making such desolating inroads on the welfare, the honour and the reputation of the American family?

Having thus briefly stated what they conceive to be the defects of our present system and habits, and the cause of them, they proceed to submit, respectfully the mere outline of a plan, which, they feel assured, would remedy the evil. Leaving this plan to be modified and perfected hereafter, as experience may suggest, by the stockholders.

Let a joint stock fund be provided to consist of not less than \$7500, in shares of 50 dollars, each; when these shall have been subscribed, let the stockholders be called together, to appoint a President, Secretary, Treasurer, and three Managers, with authority to purchase immediately, a suitable piece of ground, say 15 or 20 acres, in the vicinity of this city.—Having made the purchase, they would proceed to employ a skilful nursery man, and one or more labourers, in short to do all things needful, to carry into immediate operation the views of the company. Neither the managers, nor any of the company to receive any compensation, until the profits of the nursery will afford to pay the Stockholders six per cent. per annum at least.

To the undersigned it is a matter of surprise, that this interesting subject has not hitherto attracted the consideration of their fellow citizens; more especially when they reflect on the extraordinary advantages in the location of Baltimore for an establishment of this kind—seated as she is at the head of a noble bay, whose tributary waters without number, pour into her lap, the products of an immense area of cultivated and populous country, with her numerous turnpikes, penetrating every section of this, and the adjoining states, affording the most easy, secure and cheap modes of transportation.

Were the undersigned in the execution of the duty allotted them, to present this subject in all the lights of which it is susceptible, they would far exceed the limits they have prescribed themselves; they conclude, therefore, by congratulating their fellow citizens on that auspicious spirit of improvement in all the branches of Agriculture which now evidently pervades the United States; and considering the propagation of fine fruits, as essentially connected with this great department of domestic industry, they hope to see the establishment of a nursery encouraged, until it shall have attained that state of perfection and usefulness, that our country and posterity, enjoying its fruits, shall jointly regard it as a monument of the liberality and enterprising spirit of citizens of Maryland.

JOHN HILLEN,  
JOSEPH TOWNSEND.  
J. S. SKINNER.

March 11th, 1820.

\* The Editor of this paper, will gladly give 30 cents per gallon for a few barrels of choice cider.

† To be paid in instalments as wanting.

## Kitchen Garden for March.

*From the Practical American Farmer, published by Fielding Lucas.*

Continued from No. 50, p. 399.

### Radishes.

Sow more seed to succeed those sown in last month.

Some of the short top, salmon, and purple kinds should be sown in an open place, at the beginning, middle, or latter end of this month.

Thin the early crops of radishes, where the plants stand too close; pull up the worst, and leave the others two inches apart; clear them from weeds of all kinds, and stir the earth well about them. In dry, open weather, let them be moderately watered, which will forward their growth, and also render them crisp for eating.

A thin sprinkling of radish seed may now be sown among the general crops.

### Celery.

Sow a small quantity of celery seed in the beginning of this month, to be transplanted in May. The seed should be sown on mellow earth. For the method of treating it, see April and June.

### Beet Seed.

You may now sow some of the different sorts of beet; the deep purple red for its rich root, and the green and white sort for their leaves.

The best plants, of the rich, dark red beet, are raised in the eastern states, and those who wish to have the best seed of this kind, may procure them from Providence, as they frequently degenerate in the middle states, and become white.

After the ground has been manured, and prepared by digging, make drills in the beds one foot asunder, drop the seed therein about one foot apart, and cover them in with about an inch of earth. As many seeds are united together in one globule, several plants will frequently come up together; they may be transplanted, leaving the largest plant in its own place.

### Pot and Medicinal Herbs.

The latter end of this month, plant thyme, hyssop, sage, lavender, and winter savory, for the edgings of the borders. The suckers, with small portions of root attached to them, are to be preferred; insert them into the ground, as deep as they will bear, or strip the old roots, spreading out the tops, and planting them deep; observe to water them in dry weather. Or they may be planted in the herbary with the following:

Rue, wormwood, tarragon, tansey, chamomile, common fennel, southernwood, feverfew, common fennel, baum, burnet, spearmint, peppermint, officinal scurvy grass, celandine, hoarhound, catmint, angelica, lovage, gromwell, and any other perennial herbaceous plants may be set out in the herbary, by parting their roots or slips therefrom; the best time for doing this, is just when they begin to advance a little in growth.

Towards the latter end of this month, or

any time in the next, sow seeds of all the above mentioned kinds, and of clary, smallage, and fox-glove: these three last are biennials and do not flower until the second year; sow, also, seeds of the following annual plants, viz. borage, sweet fennel, sweet marjoram, sweet basil, summer savory, fenugreek, pot marigold, anise, and carraway. All these seeds should be sown separately in beds of rich earth, and covered from the eight of an inch, to half an inch deep, in proportion to their size.

### Capsicums, Tomatoes, and Egg-plants.

You should now sow some seed of each of these in pots, and forward them for hot beds, so as to have strong plants ready for planting in May, as soon as the night frosts shall have entirely disappeared. See April, May, &c.

### Planting out Cabbages, Beets, Turnips, &c. for Seed.

As soon as the weather is tolerably mild, in this month, plant out cabbages, beets, carrots, parsnips, turnips, &c. which were preserved during the winter, to raise seed from; plant the different kinds at a considerable distance from each other, as the farina, mixing, when they are close together, changes the seed, so that they cannot be depended upon. Tie up the shoots to stakes, provided for that purpose, as they advance for seeding, to prevent them from being broken down by winds, heavy rains, &c.

### Horse Radish.

This plant is best cultivated by cutting from the root, and will grow from the smallest slips. When you have a bed of plants, sufficient to make choice of the finest slips, select those which are without many fibres, (which should all be taken off,) these slips should be six or eight inches long, and will do as well without tops as with them.

Being furnished with these sets, and the ground trenched two spades deep, and well manured, stretch your line along the bed, then with a dibble, make holes deep enough to receive the plants, at about nine inches distance from each other, so that the upper part of the plant shall just come to the surface of the ground. When the whole row is planted, fill up the holes with rotten sifted manure; twelve inches from this, begin a second row, and so on until the bed is planted. Keep the bed clean from weeds, and once or twice in the summer, remove the earth from the root about six inches deep, and take off all the fibres, which may be produced, and again cover them with fresh manure; the roots will thus be long, straight, and free from off-sets, and may be taken up the next spring, when many, if not most of them, will be one and a half inches diameter at the crown, and eight or nine inches long; but they will be better to remain for the second year.

### Southern States.

This is the principal month in the southern states for gardening; all manner of work hitherto directed, may now be performed in the open ground successfully. In South Carolina, Georgia, &c. they may now sow the seeds of

melons, cucumbers, squashes, tomatoes, egg-plants, okras, capsicums, or red peppers, &c.

## Peach Orchard.

*Mr. THOMAS COULTER, of Bedford County, Pennsylvania, gives the following directions for cultivating Peach Trees, which he has successfully pursued in Pennsylvania and Delaware for 45 years.*

"Transplant your trees as young as possible, where you mean them to stand: if in the kernel, so much the better—because in that case, there will be no check of growth, which always injures peach trees. Plant peach trees 16 feet apart, both ways, except you would wish to take your wagon through the orchard to carry the peaches away; in that case give 24 feet distance to every fifth row, one way. After transplanting, you may plough and harrow amongst your peach trees, for two years, paying no regard to wounding or tearing them, so that you do not take them up by the roots. In the month of March or April, in the third year after transplanting, cut them all off by the ground; plough and harrow amongst them as before, taking special care not to wound or tear them in the smallest degree, letting all the sprouts or scions grow that will; cut none away, supposing six or more should come from the old stump; the young scions will grow up to bearing trees on account of the roots being strong. Let no kind of beasts into peach orchards, *hogs excepted*, for fear of wounding the trees; as the least wound will greatly injure the tree, by draining away that substance which is the life thereof; if wounded although the tree may live many years, the produce is not so great, neither is the fruit so good. After the old stock is cut away, the third year after transplanting, the sprouts or scions will grow up, all round the old stump, from four to six in number; no more will come to maturity, than the old stump can support and nourish: the remainder will die before they bear fruit. These may be cut away, taking care not to wound any part of any stock, or the bark. The sprouts growing all round the old stump, when laden with fruit, will bend and rest on the ground in every direction, without injuring any of them, for many years, all of them being rooted in the ground, as though they had been planted. The stocks will remain tough and the bark smooth for twenty years and upwards; if any of the sprouts or trees from the old stump should happen to split off, or die, cut them away, they will be supplied from the ground, by young trees, so that you will have trees from the same stump for hundred years, as I believe. I now have trees 36, 20, 10, 5, and down to one year old, all from the same stump. The young trees coming up after any of the old trees split off, die, and are cut away, will bear fruit the second year; but this fruit will not ripen so easily as the fruit on the old trees from the same stem. Three years after the trees are cut off by the ground, they will



be sufficiently large and bushy to shade the ground, so as to prevent grass of any kind from matting or binding the surface, so as to injure the trees."

### TO MAKE FAT LAMB.

"To make or fatten lamb for the market let your ewes be well attended to, and fed upon a patch of rye; upon turnips or other corresponding food; affording abundant milk: as fast as your lambs fall, and can run well alone, all you have, are to be shut up together in a dark pen or stall, of proportionate size to the number of lambs you expect, having a narrow trough, breast high to them, to be daily supplied with Indian corn meal, with the bran in it; and hanging up within their reach, one or more wisps or small bundles of fine hay for them to nibble at. This stall must communicate with, or adjoin, a larger apartment, into which you are to turn, ewes twice or thrice a day, to suckle their lambs; and to sleep all night with them.—Before turning the ewes out to pasture, each time, the lambs must be lifted into their small dark pen or stall (one six or eight feet square, is sufficiently large for thirty lambs or more.) where they will have no room to skip or play their fat away; here they will nibble so much of the fine hay, and eat so much of the dry Indian corn meal, from want of other employment, as to render themselves voraciously thirsty against the next meal of milk from their dams; which, with the other causes mentioned, makes them grow surprizingly large and fat in a short time. Lambs thus educated, will often promiscuously suck the ewes, without knowing or being attached to their own dams.—Hence a very great advantage: for when all grow large and strong, they become capable of consuming more milk than a single ewe can afford; and more especially those ewes which have two or more lambs each. For upon killing off all the lambs of an ewe, that ewe continues to give suck to the other lambs promiscuously as before, to the great advantage of the surviving lambs, now requiring additional nourishment. This is not the case when lambs run out at large with their dams."

### GREAT BRITAIN AND FRANCE.

FROM THE GAZETTE DE FRANCE.

The following important table of the state of Great Britain and France, in the year 1819, furnishes materials for much reflection:

	G. Britain & Ireland.	France.
Surface, <i>hectares</i> ,	21,114,000	50,000,000
Population, <i>individuals</i> ,	12,600,000	29,827,000
Agricultural capital, <i>frances</i> ,	61,000,000,000	57,522,000,000
Gross product of agriculture,	3,875,000,000	4,679,000,000
Gross product of manufactures	2,350,000,000	1,404,000,000
Horses, mules, &c.	1,818,000	1,657,500
Oxen, &c.	7,200,000	4,682,000

Sheep, &c.	---	40,860,000	34,189,000
Value of exports,	---	1,000,000,000	370,000,000
Cotton imported, raw & wrought	---	25,000,000	10,500,000
Public debt,	---	20,000,000,000	3,050,000,000
Interest thereon,	---	1,000,000,000	232,000,000
Revenue,	---	1,500,000,000	889,210,000
Proportion of individuals,	---	1,800,000,000	827,790,000

### Victuallers' Procession.

The procession of the victuallers, which took place in this city yesterday, was extremely gratifying, and reflected great credit on their taste and exertion. The fine display of meat occupied upwards of sixty carts, which followed each other, and formed a very long train. About forty-four of these carried each a side of beef; the remainder carried sheep, goats and pork. The drivers in the carts were neatly dressed in their white frocks, their hats being ornamented with variegated ribbons.—The horses were neatly harnessed, and by most of them small portraits Washington & Franklin were borne on their heads, which were tastily connected with the tops of the bridles. Each cart had a white flag, on which PENNSYLVANIA appeared in large characters; and those with the goats had skin of morocco, which we understand was tanned in 24 hours after it was taken from the backs of the animals. The mounted men added very much to the elegance of the procession; they were also dressed in their white frocks. Each rode a white horse; and we do not hesitate to say that such a collection of fine horses was never before exhibited in this city. A band of music preceded the carts; a neat boat about 50 feet long, mounted on wheels, and containing music and persons in the character of sailors, succeeded them. In this boat a sailor was occupied in *heaving the lead*. On the stern was written "CLAPIER," in honour of the meritorious and public spirited gentleman who raised EIGHTEEN of the beehives exhibited. In the rear were several mounted men. The whole procession exhibited a splendid appearance, and proceeded through the streets with great order and decorum.

[Philadelphia Franklin Gazette.]

### THE FARMER.

BALTIMORE, FRIDAY, MARCH 17, 1820.

Many articles are on file, which we shall endeavour to compress into the next and last number. Those who expect to get their Index, must first have paid their subscription; we can compel no one to take the paper, but we have a right to expect that those who have in a few instances been suffered to get it, without having first paid in advance, will now pay for it.

We see no immediate occasion for continuing our remarks on the cultivation of Tobacco,

for the present; because we have already given ample details as to the *first steps*; preparation of beds, planting, &c. &c. We have something to add as to packing, prizing, &c. it is intended to give a drawing of a prize, invented by the late Frederick Skinner of Calvert County—the Editor's Father.

### The News! The News!

The last arrival brings news of the long looked for death of King GEORGE III. of England—no reign was ever more eventful than his—was there ever one under which more extensive aggressions were committed against the natural rights of man—more wars undertaken against the principles of human freedom?—Have not these aggressions been committed—these wars been fomented—and rivers of human blood shed at the instigation of British councils?—by means of British intrigue—British gold—British power and thirst for monopoly? Let impartial history answer these questions. No immediate consequences of a particular nature are to be expected from the demise of this great personage. His successor has been managing the farm for many years past, while the old gentleman was sick; and has now appointed the same overseers, and they work the farm on the old plan and with the same horses and implements—so that we may regard it as a succession without a change. Not so in Spain.—The revolution had progressed exactly to that point which serves to let us see that the play will soon open, but leaves us in ignorance of the plot of the drama. The Theatre is illuminated—the audience attends—the music plays—the next arrival will lift the curtain, and let us see what is going on—to drop all metaphor: The constitutional army as it is denominated, 24000 strong, have taken Cadiz, or Cadiz seems rather to have taken it, so cordially was it received—from the nature of the place, they can hold it against any force the king can muster—but it is supposed they will *muster him*—and require him to sign the constitution of the Cortez, recognizing the principle, *that men are really human beings*—capable of feeling, and entitled to some share in government, instead of being reckoned and treated, as so many two legged sheep. But will the neighbouring illegitimate powers of Europe quietly permit even this assertion of right by the people. This extortion by his subjects, at the point of their bayonets from a legitimate monarch? and again—may not any attempt to interfere—disturb all the relations of powers as they now stand on the political chequer-board of Europe? Let politicians decide, one consequence we will prophecy, and if it does not come true, like other wise prophets, we will say nothing about *that* prediction. The commotion in Spain, will completely dislodge all South America from her government and influence; and the nation that first acknowledges its independence, will stand first in its affections as long as time endures; some sup-

pose that our government will seize the golden opportunity, to be before-hand with England, to send able and virtuous republicans, to mediate differences among their chiefs, and encourage free principles. Then might, then ought all America to stand "ready" against all Europe, giving no offence, but having it well understood—*"nemo me impune lacessit."* Some cynical politicians, suppose that Ferdinand has been instigated by England to reject the treaty, calculating on our reprisal of Florida, as a pretext for her taking a larger and richer slice elsewhere; but they forget that two English ministers have pledged their "honours" to the contrary, and it is well known that English ministers are all, all honourable men.

However, these are great matters of state, and we must take care not to get out of our depth.

"Vessels large may venture more,  
"But little boats should keep near shore."

There is nevertheless one political prayer to which every farmer will say, amen.—May something happen to lower the price of all we have to buy, and raise that of all we have to sell!!!

#### LIVE STOCK.

We were highly gratified to see the number of people attracted to view the fine Cattle, Sheep, and the large Hogs, fed and brought to this market by Mr. John Barney, of Delaware. They were exhibited to, and greatly admired by a large concourse of people in Washington Square, on Wednesday last. We understand they will be slaughtered and offered for sale; the cattle by Messrs. RUSKS, and the sheep by Mr. GEORGE ELLIOTT, in the course of next week.—Every citizen is interested in giving his mite of encouragement to those breeders of fine stock; who thus give the preference to our market.—In a subsequent number, we shall endeavour to give a more minute account of these extraordinary animals.

#### POETRY.

##### *Indian Student, Or the Force of Nature.*

From Susquehanna's utmost springs,  
Where savage tribes pursue their game,  
His blanket tied with yellow strings,  
A shepherd of the forest came.

From long debate the council rose,  
And viewing SHALUM's tricks with joy,  
To HARVARD\* Hall, o'er wastes of snows,  
They sent the tawny coloured boy.

Awhile he writ, awhile he read,  
Awhile he learn'd the grammar rules;  
An Indian savage, so well bred,  
Great credit promis'd to the schools.

Some thought he would in law excel,  
Some said in physic he would shine;

And one that knew him passing well,  
Beheld in him a sound divine.

But those of more discerning eye,  
E'en then could other prospects shew,  
And saw him lay his Virgil by,  
To wander with his dearer bow.

The tedious hours of study spent,  
The heavy moulded lecture done,  
He to the woods a hunting went,  
But sigh'd to see the setting sun!

The shady bank, the purling stream,  
The woody wild, his heart possess'd—  
The dewy lawn his morning dream  
In fancy's finest colours drest:

"And why, (he cried) did I forsake  
My native woods, for gloomy walls;  
The silver stream, the limpid lake,  
For musty books and college halls!

"A little could my wants supply—  
Can wealth and honour give me more?  
Or, will the sylvan god deny  
The humble treat he gave before?

"Where nature's ancient forests grow,  
And mingled laurel never fades,  
My heart is fixed, and I must go  
To die among my native shades."

He spoke, and to the western springs,  
(His gown discharg'd, his money spent,)  
His blanket tied with yellow strings,  
The shepherd of the forest went.

Returning to the rural train,  
The Indians welcom'd him with joy—  
The council took him home again,  
And blest the tawny colour'd boy.

\* Harvard College, at Cambridge, Massachusetts.

#### Agriculture and Economics.

*On the Comparative Quantity of Nutritious Matter which may be obtained from an Acre of Land when cultivated with Potatoes or Wheat, by Dr. Eli Ives, Professor of Materia Medica, and Botany in Yale College.*

In a good season an acre of suitable land well cultivated will produce 400 bushels of potatoes. In Woodbridge, a town adjoining New-Haven, a crop of 600 bushels of potatoes has been obtained from a single acre. A bushel of potatoes weighs 56 pounds. Multiply 400, the number of bushels, by 56, the weight of a single bushel, gives 2240, the number of pounds of potatoes produced upon one acre.

Thirty bushels of wheat are considered a good crop as the product of one acre of land. About five sixths of wheat may be considered as nutritious matter.

According to the experiments of Dr. Pearson and Einhoff, about one third of the potato is nutritious matter. From the analysis of Einhoff, 7680 parts of potatoes afforded 1153 parts of starch; fibrous matter analogous to starch 540 parts; mucilage 312 parts. The sum of these products amount to about one third of the potatoes subject to the experiment.

Sir Humphrey Davy observes, that one fourth of the weight of potatoes at least may be considered nutritious matter.

One fourth of 22400, the product of an acre of ground, cultivated with potatoes, is 5600. The whole weight of a crop of wheat calculated at 30 bushels to the acre, and at 60 pounds to the bushel, gives 1800. Deducting one sixth from the wheat as a matter not nutritious, and the weight is reduced to 1500.

The nutritious matter of the crop of potatoes, to that of wheat is as 5600 to 1500, or as 56 to 15.

The starch might be obtained by a very simple machine, recommended by Parmentier; and in seasons when potatoes are abundant, the potatoes might be converted to starch, and the starch be preserved for a length of time, and used as a substitute for wheat flour.

The machine alluded to is a cylinder of wood about three feet long and six inches in diameter, covered with sheet tin, punched outward so as to form a coarse grater, and turned by a crank. This cylinder is placed in a box of boards whose sides slope a little inward upon the principle of a hopper, and a tub of water is placed beneath. The potatoes are thrown into this box, and as the crank is turned they are crushed, and the starch or fecula subsides to the bottom of the water. It is well known, that potatoes are largely used in England mixed with flour to form a very good bread; the starch of the potato would of course answer much better.

#### TO DRY PEACHES.

*The following mode of drying Peaches is adopted by Thomas Belanfee, of Egg-Harbour, New-Jersey.*

He has a small house with a stove in it, and drawers, in the sides of the house, lathed at their bottom. Each drawer will hold nearly half a bushel of peaches, which should be ripe, and not peeled, but cut in two and laid on the laths with their skins downwards so as to save the juice. On shoving the drawer in they are soon dried by the hot air of the stove and laid up. Peaches thus dried are clear from fly-dirt, excellently flavoured, and command a high price in market. Pears thus dried eat like raisins. With a paring machine, which may be had for a dollar or two, apples or pears may be pared, and a sufficient quantity dried, to keep a family in pies, and apple bread and milk, till apples come again. With a paring machine, one person can pare for five or six cutters.

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